Available online at www.sciencedirect.com

ScienceDirect

Procedia - Social and Behavioral Sciences 181 (2015) 140 – 147

Procedia
Social and Behavioral Sciences

3rd International Conference on Leadership, Technology and Innovation Management

New Trend in Global Production System

Bilgin Orhan ÖRGÜN[a]

[a]*Okan University, Vocational School, Istanbul, 34722, Turkey, a[a]*

Abstract

As it easily guessed there will be no any area which is not affected by globalization and we are facing and experiencing the new effects of globalization day by day. In this context we absolutely sure that production system which can be either global production or international production, is under affect of globalization. For the last two or three decades the world has witnessed important changes in world production in terms of unbundling, rise of outsourcing, offshoring, vertical specialization, and new sourcing strategy of multinational enterprises. Although these changes have not completely changed the pattern of trade, the trade of intermediate goods instead of final goods is a rising phenomenon. This phenomenon, being called as "the fragmentation of production processes and the international dispersion of tasks and activities" by researchers, has been leading to the borderless production systems. So we are now facing the demolishing of borders in production process.

Key words – Globalization, Global Value Chains, International Production System, Outsourcing.

Peer-review under responsibility of Uluslararası Stratejik Yönetim veYöneticiler Derneği (usyyd) (International Strategic Management and Managers Association).

1. Introduction

Globalization has been reshaping the world in terms of economic, political, security, environmental, health, social, cultural, and others (Michael D., 2003). The multidimensional feature of globalization makes it confusing for not only researchers but for countries and companies. Whether one sees globalization as a negative or as a positive development, it must be understood that it has clearly changed the world system and that it poses both opportunities and challenges.

As to economic globalization is the increasing economic interdependence of national economies across the world through a rapid increase in cross-border movement of goods, service, technology, and capital (Joshi, R. Mohan, 2009). Whereas globalization is centered on the rapid development of science and technology and increasing cross-border division of labor, economic globalization is propelled by the rapid growing significance of information in all types of

* Corresponding author. Tel. + 90-216-325-4818 fax. +90-216-339-6136

E-mail address: bilgin.orgun@okan.edu.tr

Peer-review under responsibility of Uluslararası Stratejik Yönetim veYöneticiler Derneği (usyyd) (International Strategic Management and Managers Association).
doi:10.1016/j.sbspro.2015.04.875

productive activities and marketization, and the advance of science and technologies (CDP Background Paper No. 1, 2000). Depending on the paradigm, economic globalization can be viewed as either a positive or a negative phenomenon.

Economic globalization comprises the globalization of production, markets, competition, technology, and corporations and industries (Joshi, R. Mohan, 2009). While economic globalization has been occurring for the last several hundred years (since the emergence of trans-national trade), it has begun to occur at an increased rate over the last 20–30 years under the framework of General Agreement on Tariffs and Trade and World Trade Organization which made countries to gradually cut down trade barriers and open up their current accounts and capital accounts (CDP Background Paper No. 1, 2000). This recent boom has been largely accounted by developed economies integrating with less developed economies, by means of foreign direct investment, the reduction of trade barriers, and in many cases cross border immigration.

Advances in information technology, particularly the growing power of the internet, are changing the ways companies do business and reshaping their supply chains and production system. The new face of globalization motivates companies to restructure their operations internationally through outsourcing and offshoring of activities. Technological advances, less costly shipping and trade liberalization have transformed the way in which companies make products and distribute those worldwide (www.oecd.org).

2. Methodology

Theoretical approach was used in this paper to explain how globalization has been changing the production system. We are sure that transnational corporations (TNCs) are the most important driving factor for the new pattern of production system. Although TNCs were using offshoring, outsorcing, and vertical integration for the last three decades, the new production system, calling “borderless production system (UNCTAD, WIR Report, 2013)” quite new approach for global or international production and countries. While TNCs are still trying to define this new production system. They are using the term “global value chains (GVCs)” to call this the new system. The term GVC is supposed to be explained firstly to clarify the dimensions and to draw the exact borders of this new production system. If the GVCs activities are explained in well and effective manner, the current and future status of new production system can be guessed. Because of these reasons in this paper induction method was used, first current international production system and GVCs will be explained and then borderless production system will be analyzed.

During the last decade the term GVCs has been using increasingly by researchers, corporations, countries etc. But because of the lacking theoretical and empirical researches on GVCs, international institutions, international organizations such as United Nations Conference on Trade and Development (UNCTAD), World Trade Organization (WTO), World Bank and few national level institutions are still trying to clarify the exact borders of the GVCs and to determine statistically dimensions and amount of GVCs. However only few countries have already established necessary structures to collect data on GVCs activities.

For the purpose of conforming this methodology, mostly the reports, released by WTO, UNCTAD, Fung Global Institute, researches on GVCs and websites such as http://www.globalvaluechains.org. were analyzed and the basic realities behind the GVCs has been explained. The relationship between GVCs and Global Supply Chains (GSC) is searched by comparing GVC and GSC activities.

3. New Production System

3.1. International Production System

International production system and its actors such as local companies, TNCs, global value chains, offshoring, outsourcing, etc., should be explain, to better understand the new production system. Because new production system is interactive with the changes in this actors.

3.1.1. International production system in the past

In UNCTAD "Transnational Corporations and Integrated International Production" report, international production is defined as "characterized by a sophisticated intra-firm division of labor for each corporate function". According to the report TNCs carry out their transnational activities through a variety of non-equity arrangements such as subcontracting, franchising, and licensing as well as through the formation of strategic alliances (UNCTAD, WIR Report, 1993). As understood from this definition international production occurs mostly in the structural organizations in firms. Because in this case the form of non-equity arrangements are seen in the structural organization of firms, these forms of international expansion occur with little or no foreign direct investment (FDI).

Many studies highlight the uncertainty and complexity associated with carrying out specific activities as major sources of difficulty in specifying and enforcing contractual agreements. The greater the costs and risks associated with monitoring and enforcing "arms-length" agreements, the greater the advantages of equity ownership structures in international strategic alliances (Globerman S., 2007).

May be the most important difference between past and present production system is relationship FDI and production system. Until the end of the 1980s international production and FDI were not seen as cooperative or accompanied each other. As to 1990s, the phenomenon of international production driven by TNCs has been start to engage in efficiency-seeking FDI and this theme of WIR93 was integrated international production. However, since around 2000, global trade and FDI have both grown exponentially, significantly outpacing global GDP growth, reflecting the rapid expansion of international production in TNC-coordinated networks. Another difference can be the way of companies doing business, in the past companies were trying to do business inside their organizations but today they seek the cheapest way of producing products, efficiency seeking activities, no matter where they find, borders now are not big problem for companies.

Apple's Ipod (Linden, G. et al. 2007) and Nokia's N95 phone (Jyrki Ali, et al. 2011) provide good illustrations of the low share of offshored manufacturing in the total value added in a product and the lesser importance of borders. Although the Ipod and N95 are mostly made in Asia, most of the value accrues in the United States and Europe. How is it possible that EU-27 countries capture so much of the value based on such an apparently minor role? This occurs simply because Finland and other EU-27 countries were dominant in the branding, development, design, and management. While the final assembly is the main step in the physical incarnation of the product, this stage only commands 2% of the overall value added. However, the distribution channel, and its ultimate retail loop in particular, captures a large share of the value added—many times more than the final assembly. This shows the importance and profitability of efficiency seeking activities.

3.1.2. Improvements in international production system

In the beginning of the 1990s, stocks of FDI start increasing because of the changing in the sectoral composition in international trade. These sectoral changing occurred from the primary sector and re-source-based manufacturing towards services and technology-intensive manufacturing. Driving factors for FDI growth are developments in information and telecommunication technologies and advances in transportation system, especially in air transportation. Significant capital-intensive service industries (such as telecommunications and air transportation) have only recently opened up to FDI, providing new opportunities for TNCs.

Also manufacturing sector has experienced some changes within itself from labor-intensive to capital-intensive industries. Furthermore, increasing technological demands in much of manufacturing are leading to new forms of corporate activity. Non-and low-equity FDI have become established means to control assets abroad, and strategic alliances have expanded, particularly in those industries with short product life cycles and high research-and-development costs.

3.1.3. New international trade strategies by TNCs

The environment in which TNCs operate is very important for TNCs. If TNCs are able to have suitable attributes and to act properly in their economic and policy environment towards international economic integration, then these

TNCs can be called "qualified in international trade". To be qualified and in the race and competition, TNCs are supposed to renew their strategies, as firms respond to various pressures and opportunities, including improvements in information technologies, the convergence of demand patterns across countries, the intensifications of competition and opening of markets to international trade and FDI.

The new strategies imply significant changes in how production is organized across borders; they have led firms to locate a wider range of their value-adding activities abroad. The strategies of TNCs increasingly involve more complex forms of cross-borders integration. Under the simplest strategies –standalone affiliates or multi-domestic affiliates engaged in international production while serving a single host economy or host region- affiliates have a high degree of autonomy from the parent firm. They are responsible for most of the activities that comprise their value chain, and in some instances can act as self-contained entities.

As a result TNCs have been restructuring their operations internationally through outsourcing, offshoring activities and vertical integration. These international production operations sometimes can be called as trade in value-added, production sharing, supply chains, outsourcing, offshoring, vertical integration, fragmented production or global value chains (GVCs) (World Trade Organization, World Trade Report, 2013).

3.1.4. Concept of the new production system

In the 1990s, while the integration efforts were executed by TNCs, a new framework, called global commodity chains (GCCs), linked the concept of the value-added chain directly to the global organization of industries (Gereffi G., 2011). The insight that emerged from this work was the growing importance of global buyers (mainly retailers and brand marketers, or "manufacturers without factories") as key drivers in the formation of internationally dispersed production and trade networks. Buyer-driven commodity chains were essential, and they highlighted the significance of design and marketing in the activities of global production systems. The new framework drew attention to the diverse range of economic actors that could exercise significant power on both the supply side and demand side of global production and distribution networks.

The GVC concept focuses on value creation and value capture across the full range of possible supply chain activities and end products (goods and services). GVC analysis highlights the international expansion and geographic fragmentation of contemporary production networks and focuses primarily on the issues of industry (re)organization, coordination, governance, and power in the supply chain. Its concern is to understand the organizational reconfiguration taking place in global industries and its consequences. The GVC approach also explores the broader institutional context of these linkages, including trade policy, regulation, and standards (http://www.globalvaluechains.org).

3.1.5. International production system in present

To operate in global scale, TNCs decide to outsource certain activities to other companies, commonly referred as "third parties", companies do this for cost reasons, flexibility reasons and for strategic reasons whereby a company decides to focus upon its core competences –that is, the tasks it is good and has advantages in- and outsource all other activities (Mangan J., et al, 2012). As trade barriers falls, as communications technologies improve and as international competition intensifies, firms are turning to outsourcing for parts of their value-adding operations. They are strengthening the links with their foreign affiliates and with separate firms operating as subcontractors, licensees etc. however, these links are only for specific activities. The existence of outsourcing is based largely upon the cost advantages of particular host country for a particular component. The affiliate or subcontractor engaged in outsourcing cannot stand alone. It depends upon the parent firm for a number of key activities, while the parent firm depends on the affiliate for part of its overall value chain.

Many TNCs have moved towards "complex integration" by treating all activities across the entire value chain as potential candidates for being performed by one or more affiliates. Complex integration is also made possible by huge improvements in communication and information technologies which allow TNCs to coordinate a growing number of activities in a widening array of locations. This in turn, changes the way in which TNCs structure their activities (UNCTAD, WIR Report, 1993). Complex integration has another driving factor, which convergence in markets means

more and harder competition for TNCs. More and harder competition made TNCs seek cost savings and profits from throughout their value chains.

Complex integration is also being driven by the tendency for markets to converge. More products are sold in the same or similar form in a growing number of national markets. In addition, competition forces firms to seek cost savings and profits from all segments of their value chains. To carry out this aim, companies are arranging certain functions –research and development, procurement, accounting, data entry and processing, as well as activities for specific products or product lines, such as component manufacturing and assembly- in a way that requires close links between parents and affiliates and firms linked via alliances. We should not forget the geographical dispersion of production, with these developments mentioned above about TNCs and their geographically dispersed production activities caused to have regional and global strategies instead multi domestic strategies. Thus, activities such as research and development or procurement may be situated in an affiliate in a host country or region and linked to operations elsewhere to produce goods and services that are sold in many markets. With that type of integration, separate activities performed in international locations are valued according to how they contribute to the objectives of the firm as a whole, rather than their profitability at the host country location.

Integration is proceeding at different rates across industries and functions. The cross-national division of labor has undoubtedly proceeded most rapidly in certain manufacturing industries, such as automobiles and electronics, and in services industries including air transport and banking. Research and development, spurred by advances in information technologies, is becoming increasingly cross-border, both within firms and between firms through strategic alliances. But a truly global research-and-development and manufacturing system is still restricted to a relatively small number of firms. Financial management is probably the most global of the major corporate functions, stimulated by electronic transfers and 24-hour trading day. Marketing has taken advantage of communications technologies, but is still subject to national, regional and cultural differences in consumer tastes and habits. Such activities as data processing and software-writing can take place almost anywhere in the world. On the other hand, regulatory differences mean that accounting and legal reporting are still largely nationally based. In principle, however, virtually every corporate function can be located anywhere and carried out in an integrated manner for a corporate system as a whole. To the extent that this is the most cost-effective way of organizing production –as it seems to be- it becomes a benchmark for firms that have not yet seized this opportunity or have not been driven by competitive pressures to re-engineer themselves.

Integrated international production through the operations of TNCs, substantially deepens integration between countries, as it brings with it a package of relationships at the level of production. Even simpler forms of international production, such as stand-alone operations of foreign affiliates, involve links between parent and affiliates through ownership, management, technology-transfer and the sharing of profits. Integrated international production extends these linkages to most or all functional activities of the firm. The result is a dense network of interrelated relationships between TNCs and their affiliates and among affiliates, involving intra-firm trade in goods and services, as well as other intra-firm resource-flows. The expansion of integrated international production results in stronger linkages between countries and regions through increased flows of goods, services, and other resources, at the same time as these flows increasingly take place within the domain of individual TNCs (Ivarsson Inge, 1996).

3.2. Global Value Chains (GVCs)

Recently international production, trade and investments are increasingly organized within so-called global value chains (GVCs) where the different stages of the production process are located across different countries. Companies try to optimize their production processes by locating the various stages across different sites according to the most optimal location factors across countries. In the same time companies are increasingly seeking to achieve competitive advantages by expanding their operations to a global scale (Yue W., 2012).

UNCTAD defines GVCs in World Investment Report (2013) as “Today’s global economy is characterized by global value chains (GVCs), in which intermediate goods and services are traded in fragmented and internationally dispersed production processes” (UNCTAD, WIR Report, 2013).

Success in today's global market requires decision makers to understand how to design and manage value-added networks capable of using worldwide resources to meet global consumers' needs (Fawcett E., Et Al, 2012). Patterns of value added trade in GVCs determine the distribution of actual economic gains from trade to individual economies. The spread of GVCs is greater in some industries where activities can be more easily separated, such as electronics, automotive or garments, but GVCs increasingly involve activities across all sectors, including services. While the share of services in gross exports worldwide is only about 20 per cent, almost half (46 per cent) of value added in exports is contributed by services-sector activities, as most manufacturing exports require services for their production. About 60 per cent of global trade, which today amounts to more than $20 trillion, consists of trade in intermediate goods and services that are incorporated at various stages in the production process of goods and services for final consumption. The majority of developing countries are increasingly participating in GVCs. The developing-country share in global value added trade increased from 20 per cent in 1990 to 30 per cent in 2000 to over 40 per cent today. However, many poorer developing countries are still struggling to gain access to GVCs beyond natural resource exports (UNCTAD, WIR Report, 2011).

Global value chains are becoming more consolidated (http://www.globalvaluechains.org.). Large multinational manufacturers, retailers, and marketers who manage global sourcing networks are proclaiming that they want fewer, larger, and more capable suppliers and that they will operate in a reduced number of strategic locations around the world. This is likely to promote a higher degree of regional sourcing, with suppliers located close to the major consumer markets in North America, Western Europe, and East Asia. In industries like apparel, leading suppliers (countries and firms alike) have strengthened their positions in the industry. On the country side, China has been the big winner, although Bangladesh, India, and Vietnam have also continued to expand their roles in the industry. On the firm side, the quota phase out and economic recession have accelerated the ongoing shift to more streamlined global supply chains, in which lead firms choose to work with fewer, larger, and more capable suppliers that are strategically located around the world (Gereffi G. Et Al., 2010).

3.3. The role of TNCs in shaping Global Value Chains (GVCs)

TNCs (UNCTAD, WIR Report, 1993) has an important role in influencing world development. TNCs have an impact because they embody a package of potentially growth-enhancing attributes, including capital, technology, managerial and organizational know-how and access to international markets. These are becoming increasingly potent features of the growing integration of the world economy.

Investment and trade are inextricably intertwined. Efficiency-seeking FDI, through which firms, TNCs seek to locate discrete parts of their production processes in low-cost locations, is particularly associated with GVCs; it increases the amount of trade taking place within the international production networks of TNCs. The international production Networks shaped by TNC parent companies and affiliates account for a large share of most countries' trade. On the basis of these macro-indicators of international production and firm-level evidence, UNCTAD estimates that about 80 per cent of global trade (in terms of gross exports) is linked to the international production networks of TNCs, either as intra-firm trade, through NEMs (which include, among others, contract manufacturing, licensing, and franchising), or through arm's-length transactions involving at least one TNC (UNCTAD, WIR Report, 2013). The international production networks of TNCs, within which most trade takes place, are heavily geared towards providing those value added inputs required to generate trade. For example, GVCs make extensive use of services: while the share of services in gross exports worldwide is only about 20 per cent, almost half (46 per cent) of value added in exports is contributed by service-sector activities, as most manufacturing exports require services for their production.

3.4. *Current Situation of International Production (UNCTAD, WIR Report 2013)*

International production growing at a steady pace. In 2012, the international production of TNCs continued to expand at a steady rate because FDI flows, even at lower levels, add to the existing FDI stock. FDI stocks rose by 9 per cent in 2012, to $23 trillion. Foreign affiliates of TNCs generated sales worth $26 trillion (of which $7.5 trillion were for exports), increasing by 7.4 per cent from 2011. They contributed value added worth $6.6 trillion, up 5.5 per cent, which compares well with global GDP growth of 2.3 per cent. Their employment numbered 72 million, up 5.7 per cent from 2011.

The growth of international production by the top 100 TNCs, which are mostly from developed economies, stagnated in 2012. However, the 100 largest TNCs domiciled in developing and transition economies increased their foreign assets by 20 per cent, continuing the expansion of their international production networks.

Global trends in international production are reflected in the internationalization levels of the world's largest TNCs. Data for the top 100 TNCs, mostly from developed economies, show that their internationalization in 2012 slowed. Foreign sales of the largest 100 TNCs in the world declined 2.1 per cent in 2012, while their domestic sales –largely in developed economies – remained stable. Likewise, foreign employment and foreign assets stagnated, while their domestic employment and assets increased by 6.8 and 5 per cent, respectively. These data reflect both a change in strategy by the top 100 TNCs that seems to focus more on domestic production and a change in the composition of the top 100 in 2012.

The importance of the largest TNCs in the universe of TNCs is declining slowly. Their share of all TNCs' foreign assets in 2011 was down to 9.3 per cent, compared with 12 per cent a decade earlier, though their share of foreign affiliates' employment increased marginally from 13.7 per cent in 2001 to 14.4 per cent in 2011. The largest 100 TNCs' share in foreign global sales increased sharply, however, from 13 per cent to 21 per cent over the same time period. The decrease in foreign assets coupled with the increase in foreign sales largely reflects the importance of non-equity modes; i.e. a rising share of foreign production is controlled through contracts rather than direct ownership. By contrast, the largest 100 TNCs from developing and transition countries are strengthening their position within the TNC universe. Their share in global production is rising: the foreign assets share rose from 0.8 to 1.6 per cent between 2001 and 2011, that of foreign sales went up from 0.9 to 5.9 per cent, and that of foreign employment increased from 1 to 8 per cent during the same period.

UNCTAD estimates that about 80 per cent of global trade (in terms of gross exports) is linked to the international production networks of TNCs, either as intra-firm trade, through NEMs (which include, among others, contract manufacturing, licensing, and franchising), or through arm's-length transactions involving at least one TNC.

4. Conclusion

The term international production goes many decades back. Although international production has been seen as characterized by a sophisticated intra-firm division of labor for each corporate function until 1990s, today when we talk about it, actually we talk about fragmentation of production. Fragmentation of production process is mostly characterized by cost concerns, flexibility of production process, qualification of labor and geography.

The fragmentation of production process especially occurred in international trade of intermediate goods and services that are incorporated at various stages in the production process of goods and services for final consumption. The fragmentation of production processes and the international dispersion of tasks and activities within them have led to the emergence of borderless production systems – which may be sequential chains or complex networks and which may be global, regional or span only two countries. These systems are commonly referred to as global value chains (GVCs).

New international production system and FDI are very interactive and goes hand by hand, contrast to FDI during 1980s. Because in 1980s only very small part of international production was companied by FDI. Today efficiency seeking FDI mostly done by foreign affiliates of TNCs, and growth rate in international production almost parallel with the growth rate in FDI.

Before this new production system became famous and spread all over the world, especially the developing countries felt themselves mandatory and helpless to establish their own supply chains to be a part of industrialized global world. But with the introduction of new fragmented, integrated global production system now developing countries don't have to establish their supply chains, they should only be part of any GVCs to be industrialized. If FDI is acting parallel with GVCs activities of TNC, this means that there is a correlation between GVCs activities and FDI, and FDI goes to where GVCs go. Because of this reason developing countries which are trying to attract FDI, are supposed to attract GVCs activities of TNCs as well.

References

Gereffi G., 2011, Global Value Chains And international Competition, The Antitrust Bulletin: Vol. 56, No. 1/spring 2011, p. 37.

Gereffi Gary & Stacey Frederick, (2010), The Global Apparel Value Chain, Trade and the Crisis: Challenges and Opportunities for Developing Countries (World Bank Policy Research Working Paper 5281, 2010).

Fawcett E., Matthew A. W., (2012), Mitigating the Myopia of Dominant Logics: On Differential Performance and Strategic Supply Chain Research, Journal of Business Logistics, 2012, 33(3), pp. 173–180.

Inge Ivarsson, (1996), Integrated International Production: A Study of Foreign Transnational Corporations in Sweden, School of Economics and Commercial Law, University of Göteborg publications, Edited by the Departments of Geography, University of Göteborg Series B, no 90.

Joshi, Rakesh Mohan, (2009), International Business, Oxford University Press, New Delhi and New York , ISBN 0-19-568909-7.

Jyrki Ali-Y., Petri R., Timo S., Pekka Ylä-A., 2011, Who Captures Value in Global Supply Chains? Case Nokia N95 Smartphone, J Ind Compet Trade 11: pp. 263–278.

Linden, G.; Kraemer, K. L.; Dedrick, J., (2007), Who Captures Value in a Global Innovation System? The Case of Apple's iPod, Personal Computing Industry Center (PCIC), (Irvine, CA, Paul Merage School of Business, University of California, June), pp. 76-98.

Michael D. Intriligator, (2003), World Economy: Potential Benefits And Costs And A Net Assessment, Policy Breef, Milken İnstitute. P. 1-24.

Shangquan Gao, (2000), CDP Background Paper No. 1 ST/ESA/2000/CDP/1 2000 Economic Globalization: Trends, Risks and Risk Prevention, p. 1.

Steven Globerman, Bo Bernhard Nielsen, (2006), Equity Versus Non-Equity International Strategic Alliances Involving Danish Firms: An Empirical Investigation of the Relative Importance of Partner and Host Country Determinants. Western Washington University Publicatioons, College of Business and Economics, Bellingham, WA, USA, p. 1-36.

Yue W., (2012), A dual-response strategy for global logistics under uncertainty: a case study of a third-party logistics company, International Transactions Inoperational Research, 19 (2012), pp. 397–419.

Joint OECD-WTO Note, (2013), Trade in Value-Added: Concepts, Methodologies and Challenges.

United Nations Conference on Trade and Development (UNCTAD), World Investment Report, 1993, Transnational Corporations and Integrated International Production. An Executive Summary.

United Nations Conference on Trade and Development (UNCTAD), World Investment Report, 2002, International Production System.

United Nations Conference on Trade and Development (UNCTAD), World Investment Report, 2011, Non-Equity Modes of International Production and Development.

United Nations Conference on Trade and Development (UNCTAD), World Investment Report, 2013, Global Value Chaıns: Investment and Trade for Development.

World Trade Organization (WTO), World Trade Report (WTR), 2012, Global Value Chaıns: Investment And Trade For Development.

World Trade Organization (WTO), World Trade Report (WTR), 2013, Factors Shaping Future of World Trade.

http://www.globalvaluechains.org.